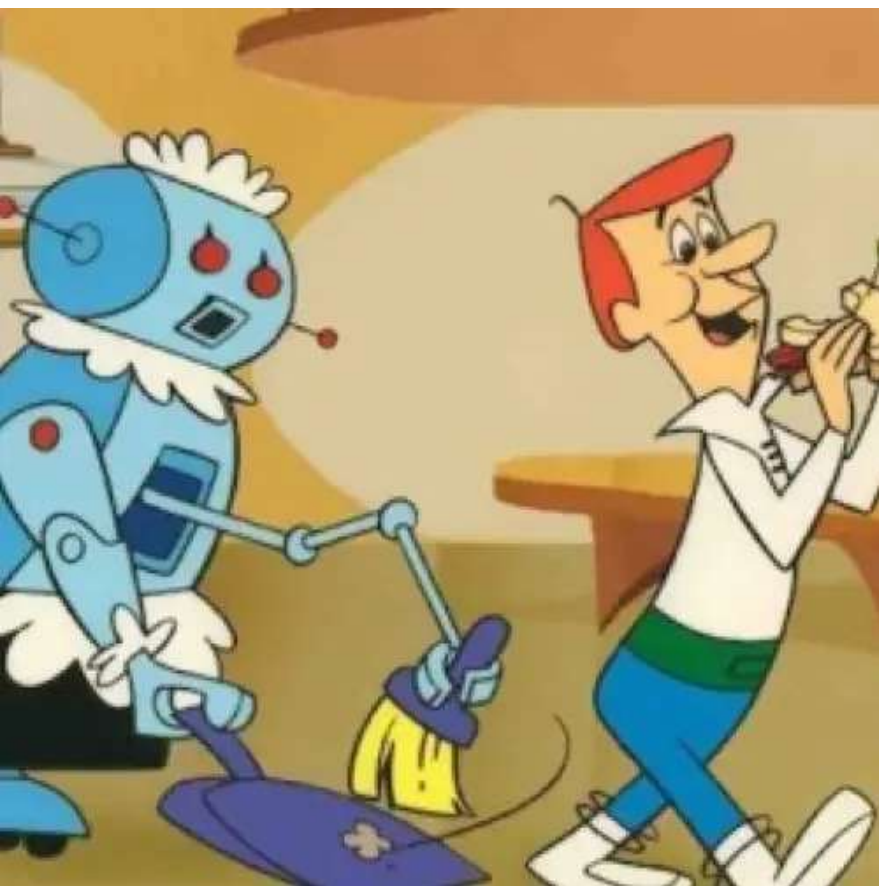


- Agenda** | AI, knowledge,
& social data
1. AI from a technosocial perspective
 2. Group discussions

AI as invaluable helper?

OR

AI as tool of oppression?



AI is “expected to mimic, augment, or displace human agency” (Joyce et al 2021, 2)

1. Theory

Flattening social data and problems



2. Implementation

Capitalist and state-sanctioned framework

3. Uses

Policing, surveillance, redlining (but also disaster management, accessibility, etc.)



4. Downstream

The output from AI is targeted at and consumed by everyone

Theory

The technosocial in *AI theory*

Implementation

Uses

Downstream

- ∴ Social factors influence the kinds of questions that get asked, and what constitutes an 'appropriate' answer

(Kuhn 1970)

- ∴ "Rendering the world technical"

Tania Murray Li & Samantha Breslin

- ∴ Data representations, objective functions, analysis of outcome, etc.

(Sismondo 2009, Ch 6)



Theory

The technosocial in *AI implementation*

Implem-
entation

∴ Data and evidence are not 'neutral'
(Gould 1981; Amann and Knorr Cetina 1988)

Uses

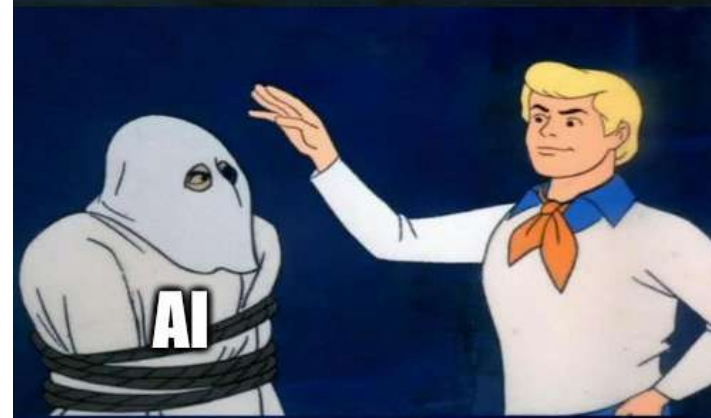
∴ Political, institutional, and economic forces favor the interests of powerful players (DeepMind, OpenAI, etc)

Down-
stream

(Sismondo 2009, Ch 17; Wolfe 2018)

∴ The training, testing, and provision of AI tools requires extensive (and usually exploitative) human labor

Roberts (2020)



Theory

The technosocial in *AI uses*

**Implem-
entation**

∴ AI and ML are used in healthcare, policing, marketing, sentencing, profiling, content moderation, ...

Uses

∴ The uses of AI are very flexible, but tend to be used more effectively by those in power
(Adams 2002)

**Down-
stream**

∴ AI may be especially compatible with oppressive structures
(Winner 1980)



Theory

Implementation

Uses

Downstream

The technosocial in *AI's downstream consequences*

- ⋮ Everyday life is increasingly mediated by AI (social media, news articles, navigation, ...)
- ⋮ Consumers of AI-generated content are increasingly aware of its role in, e.g., curation
- ⋮ AI tools are deployed to interact with AI tools
- ⋮ AI content is 'poisoning the pool' of available training data

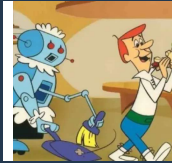


Local knowledge

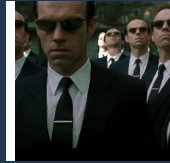
| ∴ **Allen (2018)**

| *Strongly Participatory Science and
Knowledge Justice in an Environmentally
Contested Region*

Image credit



Still from [The Jetsons](#) (1962).



Still from [The Matrix Resurrections](#) (2021).

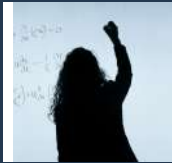


Photo by [ThisisEngineering_RAE](#) on [Unsplash](#)



Photo by [Alexander Sinn](#) on [Unsplash](#)



Photo by [Maxim Hopman](#) on [Unsplash](#)



Photo by [ROBIN WORRALL](#) on [Unsplash](#)



Image generated with stability.ai's SDXL v1.0 model



Photo by [Sergei Bobylev](#)\TASS via [Axios](#)